Living in Queensland

Preparing for and communicating in disasters and emergencies

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***ABSTRACT**: A series of severe weather events in Queensland during 2010 and 2011 and a greater interest in national security have catalogued a renewed government interest in ensuring that Australians understand the risks and take proactive measures to prepare for disasters. The Living in Queensland Survey uses an 'all hazards approach' to ascertain respondents' attitudes towards disaster preparedness, perceptions of risk, and perceptions of community capacity. The findings highlight what Queenslanders are doing to prepare for natural and terrorist disasters and further illustrate how preparedness behaviour, perceptions of community, and confidence in government have changed since the floods and cyclones of 2011.*

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Introduction

Recent events that have occurred on both Australian and international soil have catalysed the need for individuals to prepare for and estimate the risk of disasters and emergencies that could affect their households, communities, and nation. The resurgence of ideologically motivated terrorism and the increasing occurrence of natural hazards has emphasised the importance of understanding how and why Australians prepare for disaster. Pertinent to this is understanding how risk is perceived and communicated throughout the disaster management process, and whether these messages are received differently depending on the type of disaster. The events of 11 September 2001 increased the necessity for

nations, particularly in the West, to recognise a growing risk in the potential for man-made terrorist disasters. The aftermath of the Bali bombings elicited comparable effects within Australia; the direct proximity and effect the bombings had on Australian lives drove home the perception that man-made disasters were a real threat, even if they were not happening on Australian soil. In addition, the threat of natural disasters within Australia has become more apparent as severe weather events have become more frequent and severe (Templeman & Bergin, 2008). As a result, disaster management initiatives have become a prominent issue and are being communicated through government policies, non-profit organisations, and the media.

The summer of 2011 saw Queensland endure a series of severe weather events that tested the strength and resolve of preparedness and disaster responsiveness across the state. Referred to as the Summer of Disasters (Bajracharya, Childs, & Hastings, 2011b), which encapsulated flash flooding and severe urban and rural flooding, it culminated with Cyclone Yasi, which caused extensive damage to multiple towns in Queensland's north. The resulting damage included widespread destruction of homes, the death of 21 citizens, destabilisation of city infrastructure (electricity, gas, and water), and increased media and government attention to the importance of preparedness and risk estimation.

When effectively implemented, disaster management initiatives provide a fundamental tool to enhance the capacity and resilience of communities in response to disaster (Härtel & Latemore, 2011). These recent experiences in Queensland exemplify the necessity for a collaborative effort by both members of the community and government entities at all tiers to address the individual concerns of each community, and develop appropriate and efficient approaches to respond to current disasters and prepare for future disasters. All tiers of government within Australia (local, state, and federal) are increasingly emphasising the necessity for Australian residents to take individual responsibility to prepare for disasters. These messages appear in the form of government encouragement to enhance proactive preparatory actions among individuals, such as the development of safety and evacuation plans. As a result, the responsibility for preparation shifts from government agencies to residents and signifies the importance of understanding how and why people prepare and how risk can be communicated so preparedness can be enacted (COAG, 2011).

This study uses data from the Living in Queensland (LIQ) Survey of Wellbeing to explore how Queenslanders estimate risk, prepare for disaster, and perceive their own and the government's role in protection and recovery. Additional data retrieved from a fourth wave of the LIQ survey after the Summer of Disasters allows the examination of changes in preparedness and risk before and after the events. This study is guided by the following research questions:

1. What are Queenslanders doing to prepare for both terrorist events and natural hazards, and are there similarities and differences?
2. How do Queenslanders view their local, state, and federal government role, as well as their own role in preparing for, responding to, and recovering from disasters?
3. What is the relationship between perception of community cohesion and preparedness behaviour?
4. How have perceptions of risk and preparedness behaviour changed since the 2011 Summer of Disasters?

The results of this study contribute to an on-going program of research that seeks to explore how Queenslanders estimate risk, prepare for and respond to disaster, and are affected by the aftermath of emergency events. The LIQ data is unique and timely because the first survey items about preparedness were distributed prior to the Summer of Disasters, and the follow-up survey was administered six months after the destruction of these events. This study thus offers a unique opportunity to examine how preparedness has changed due to experiencing a disaster. Additionally, a comparative analysis of responses before and after the emergency events illuminates differences in preparedness behaviour. This affords greater comprehension, both theoretically and from a policy perspective, of how risk is communicated and what influences residents to act based on the type of threat.

Communicating the necessity to prepare

Climate change and the resurgence of religious and ideologically motivated terrorism against the Western world has seen an increase in natural and man-made emergencies and disasters, and thus an urgent need to ensure that societies the world over are prepared. The events of 11 September 2001 (9/11) have thrust methods of disaster preparedness as a task of utmost significance within the social and political sphere. Prior to this, disaster preparedness initiatives were primarily limited to natural hazards (Bourque, Mileti, Kano, & Wood, 2010). Measures to prepare for emergency events and natural disasters require effective communication, cooperation, and cohesion

among and between government organisations and members of the community. The way in which people prepare for emergencies and the disparities among diverse social groups in their acceptance or rejection of certain messages have great consequences for how and why people prepare for or resist preparing for disasters and the perceived and actual role the government has throughout this process. Comprehending citizens' responses to and understandings of natural and terrorist disasters has vast implications for a policy perspective on community and government planning for disasters (Perry & Lindell, 2003).

Rodríguez (2006) argues that effective communication is fundamental to the ability of individuals, groups, and organisations to prepare for disaster. The way that information is disseminated and perceived by the community is essential to shaping their willingness to react and prepare. This trend can be evidenced in both natural disasters (West & Orr, 2007) and terrorism contexts (Stohl, 2011). This information is often distributed by government entities through various media outlets; however, this communication stream has been shown to have adverse effects on how people perceive the information they receive, act on it, and trust the governments who provide the information. West and Orr (2007) found that citizens do not believe that the interests of the government align with the interests of the community and further do not believe that media portrayals are accurate. It is thus imperative for the role of the government to align with and respond to the social context that frames the communities they govern, especially if they want residents to cooperate in disaster preparedness. In Australia, while the three tiers of government (local, state, and federal) have specific roles in disaster management, local government entities have explicit responsibilities that consider the structural makeup of the communities they govern (Bajracharya, Childs, & Hastings, 2011a).

The emergence of preparedness initiatives

Natural disasters in Australia and internationally have catalysed the revision of disaster preparedness and management plans. Moreover, the events of 9/11 have also driven national security and emergency management to the top of the political agenda. Although in Queensland, and Australia more generally, the risk of a terrorist event is much less likely than a natural disaster event, it has become a major priority of government entities in recent years to increase and enhance people's knowledge of general disaster preparedness (West & Orr, 2007). The Australian Health Disaster Management Policy Committee (AHD-MPC) was 'established to identify Australia's

level of preparedness to respond to the consequences of a terrorist attack or a naturally occurring disaster' (Smith, 2006, p. 6) with great input from representatives of each Australian state and territory. With assistance from the Commonwealth's *Emergency Management Australia (EMA)*, state and territory governments are required to uphold and preserve the safety of their citizens. A large component of this requires governments to ensure that their citizens are prepared for natural and man-made disasters (Abrahams, 2001).

The Council of Australian Governments (COAG) National Strategy for Disaster Resilience (2011) clearly sets out the roles of government and individuals in disaster preparedness and response. Specific to disasters caused by severe weather, the COAG strategy recognises the 'increasing regularity and severity of disasters' that face Australians and have adopted policies that reflect that increased risk. In particular, disaster planning is a collective effort involving government and non-governmental sectors, communities, and individuals, and highlights the shared responsibility among these actors as the best possible approach to managing the increasing risk and response to disasters in the Australian context. The strategy emphasises that individuals must take responsibility for preparing their households in the event of a disaster through active planning and using information provided by government. Recognising the shared responsibility among all these actors reflects the *all hazards approach* to disaster planning by local, state, and federal government. Moreover, there is a great emphasis on the role of local governments, as it has been argued that effective disaster preparedness stems from locality in emergency planning (Kusumasari, Alam, & Siddiqui, 2010).

This approach allows for the appropriate distribution of resources (Ryan, 2005), the dissemination of skills of certain stakeholders such as police officers, fire-fighters, government officials, paramedics, and citizens (Abrahams, 2001); and, ultimately, the application and execution of the most appropriate practical response (Cornall, 2005). In addition, it is important to understand that the *all hazards approach* prescribes the same disaster management plan for many types of disasters. This means that the institutional response to a natural disaster would be very similar to the response to a terrorist attack. The *all hazards approach* directs not only the what should be done in response to a disaster, but stipulates a *coordinated effort* between the multiple arms of government and other agencies that play an important role in response, recovery, and preparation. One reason for this is to ensure that each contributing party does not deviate from the preparedness

plan and thereby complicate the response process (Alexander, 2005; Cronan, 1998).

Within Queensland, the Disaster Management Strategic Policy Framework is a tool to guide the organisations involved in disaster management to implement effective policies and programs to enhance the preparedness of the Queensland community (The Department of Community Safety, 2010) and reflects the COAG strategy for building resilience in the face of disaster. Among the preparedness strategies outlined within this framework is the requirement for stakeholders to 'drive behavioural and social change through targeted community disaster resilience and preparedness education and awareness initiatives' (The Department of Community Safety, 2010, p. 10). The importance of encouraging community and individual engagement, cooperation, and proactive involvement in preparedness initiatives relieves the demand on state resources. This is part of a transition from disaster preparedness and preventive strategies being the sole responsibility of governments, to involving and collaborating with members of the community to ensure that, in the event that the government cannot immediately assist citizens, these citizens are capable of effectively responding to disasters. This does not completely detach the responsibilities of government during disaster preparedness strategies, with local governments being the first point of call in dealing with disasters (Emergency Management Queensland, 2008). Local governments have the most active role in disaster management as it has been argued that effective disaster preparedness stems from locality in emergency planning (Kusumasari, Alam, & Siddiqui, 2010). These emergency planning approaches are, therefore, underpinned by an *all hazards approach* to disaster preparedness within Australia.

Public perceptions of the government's role

The effectiveness of government initiatives lies almost solely in the way the public perceive the message and respond to or reject it. Based on research in the USA, West and Orr (2007) argue that such perceptions are crucial to society's ability to survive in the event of a disaster. Closer to home, the distribution of hazard information to communities in New Zealand has been shown to diminish concerns and fear about disasters (Paton & Johnston, 2001). However, research in developing nations, such as those affected by the Asian tsunami in 2004, consistently highlights the fragmented knowledge that authorities have about disaster management, which creates ill-informed communities (Mohanty, Panda, Karelia, & Issar, 2006; Seneviratne, Amaratunga, Haigh, & Pathirage, 2010a; Seneviratne, Baldry, & Pathirage, 2010b). As a result, a community's lack of trust

of government is exacerbated. Thus, it has been argued that the ability of the government to gather a more comprehensive array of information pertaining to disasters is crucial to effective and proactive emergency management approaches that will educate the community (Moe & Pathranarakul, 2006; Seneviratne et al., 2010a). Moreover, as can be illustrated in the Australian context before and after the 2011 Queensland floods, the employment of staff to specifically aid relations between the government, emergency services, and the community in executing effective disaster-management initiatives is essential to enhancing community trust and cooperation (Apan, Keogh, King, Thomas, Mushtaq, & Baddiley, 2010).

Community knowledge, cohesiveness, and disaster preparedness

The cohesiveness of a society has positive implications for effective disaster preparedness; however, the social construction of communities can induce great variance in their level of preparedness and willingness to prepare (Wise, 2007). The level of willingness has also been shown to stem from a lack of knowledge, thus leading to inaction to prepare for disaster (Larsson & Enander, 1997; Tierney, Lindell, & Perry, 2001). The lack of knowledge to act in preparation for disaster has hindered people's ability to prepare and thus can help explain their unwillingness to take precautionary and preparatory measures, even in well-developed nations such as Sweden (Larsson & Enander, 1997), the USA, UK, and New Zealand. As a result, the way in which the importance of disaster preparation is communicated is imperative, and subjective to the requirements of individuals within the wider community. Preparatory measures can include developing emergency plans, stockpiling supplies, purchasing safety equipment, duplicating important documents, or reducing certain forms of travel. In addition, people often assume that they are less vulnerable to disasters and thus adopt an ignorant stance towards available information (West & Orr, 2007). However, scholars have noted the success of community empowerment strategies in enhancing knowledge and thus confidence in emergency and disaster contexts (Paton & Johnston, 2001). Key to its success is the mutual cooperation and consensus from all those involved to identify issues and develop solutions that consider the needs, values, and beliefs of the community (Kahn & Barondess, 2008). Without accounting for the social construction of a community and its specific value structures, such strategies will fail (Paton & Johnston, 2001). However, while community-based disaster preparedness strategies are becoming prominent in successful disaster management approaches, the cohesiveness of the community in question remains a pertinent concern to their effectiveness (Allen, 2006).

The cohesiveness of a community is fundamental to their ability to prepare for disaster. Mathbor (2007) notes that acceptance of the cultural and social diversity of a community enhances trust and mutual cooperation and further improves their level of preparedness both before and after a disaster. King and MacGregor (2000) argue that resilience to natural disasters is in part due to feelings of belonging and a sense of connection within one's community. This is further echoed by Sweet (1998), who attributes the level of community cohesion to the ability to respond to disasters with effective strategies, appropriate behaviour, and temporarily altered social relations, which he notes returns once the after-effects of disaster are dealt with. It is the community structures, demographic characteristics of people within a community, and the cohesiveness that binds the community collectively that cause greater perceptions of risk and, thus, efforts to prepare for disaster to flourish (Anderson-Berry, 2003).

Communicating risk as an important component of emergency management

The way in which individuals perceive and understand communicated messages of risk provided by government and media sources shapes the way in which they prepare. Risk communication is based upon the context of the risk message, the socio-demographic characteristics of the intended audience, the humanisation and personalisation of the risk, and repetition of the circulation of the message combined with additional sources of information that will enhance peoples' understanding (Mileti, Fitzpatrick, & Farhar cited in Tierney, Lindell, & Perry, 2001). A multitude of contextual, social, and cultural variables must be taken into consideration before preparedness strategies can be created to assist communities in preparing for both natural and man-made disasters (West & Orr, 2007). This requires an understanding both from government organisations as well as members of the community of the social construction of society and ways in which to enhance social cohesion (Wise, 2007). From here, well-informed preparedness plans can be drafted and disseminated, along with educational information to enhance the knowledge of the community (Ryan, 2005). Effective communication underpins the way in which the information is received, understood, and acted upon by the community (Rodríguez, 2006); and it also connects the concerns, ideas, and suggestions from individuals and government entities to initiate and sustain cohesiveness (Sweet, 1998). The cohesiveness of a community bridges diversities and dissimilarities among individuals, enhancing social affiliations and the likelihood to assemble and collectively prepare for disasters.

In this study, we investigate the impact of some of these contextual, social, and cultural variables on community members' perceptions of and responses to disaster. In particular, we seek to understand how a disaster event can impact on perceptions of risk and preparedness behaviours, as well as the role of government. The following results focus on Queensland residents from across all six regions of the state.

Data

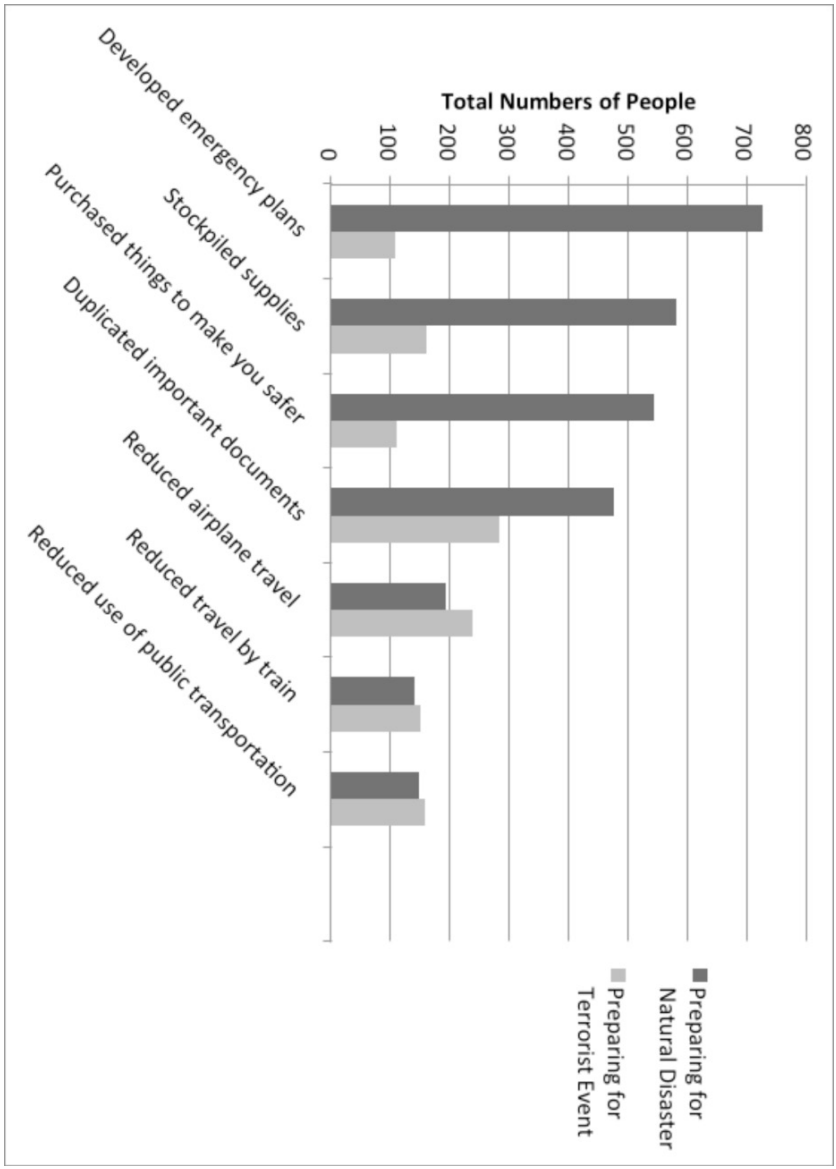
In order to investigate these issues, we primarily used data from the third wave of a longitudinal study of social well-being in Queensland. The LIQ Survey, beginning in 2008, was designed as a three-year longitudinal study examining the influence of social and economic factors on Queenslanders' social wellbeing (Boreham & Povey, 2011). The data was collected from a random sample of people living in Queensland, stratified in clusters in order to ensure representation from across the six regions within the state. Participants were recruited via Computer Assisted Telephone Interviewing (CATI), and were subsequently asked to respond to a mail-out questionnaire. The third wave of this survey was collected in 2010 (N = 2360), immediately before the Summer of Disasters hit the state. This wave of the survey sought to understand respondents' attitudes towards natural hazards and terrorism events, the government's role in preparing for these disasters, and individuals' perceived level of preparedness before and after a natural disaster or terrorist attack on an individual, community, and national level. A follow-up wave of data from 1403 of the respondents from wave 3 was also collected through CATI six months following the Summer of Disasters. This short follow-up survey again assessed perceptions of the risk of a natural disaster, preparedness behaviour, and perceptions of community and government following the events of the previous summer (N=1403).

Results

What people are doing to prepare for a natural disaster

The results highlighted that, although 45% of respondents (n = 1059) had taken no action to prepare for a natural disaster and only 1.5% (n = 35) had taken up all seven of the listed actions, more than half of respondents had engaged in at least some form of proactive natural disaster preparedness activities. Of these activities, the most salient were developing emergency plans (approx. 30%; n = 708) and stockpiling supplies (see Figure 1). Respondents were significantly less likely to prepare for a terrorist attack than a natural disaster. This indicates that government messages about preparedness initiatives were received and acted upon by respondents in the natural disaster context more than the terrorism context.

Figure 1. What people are doing to prepare for a natural disaster

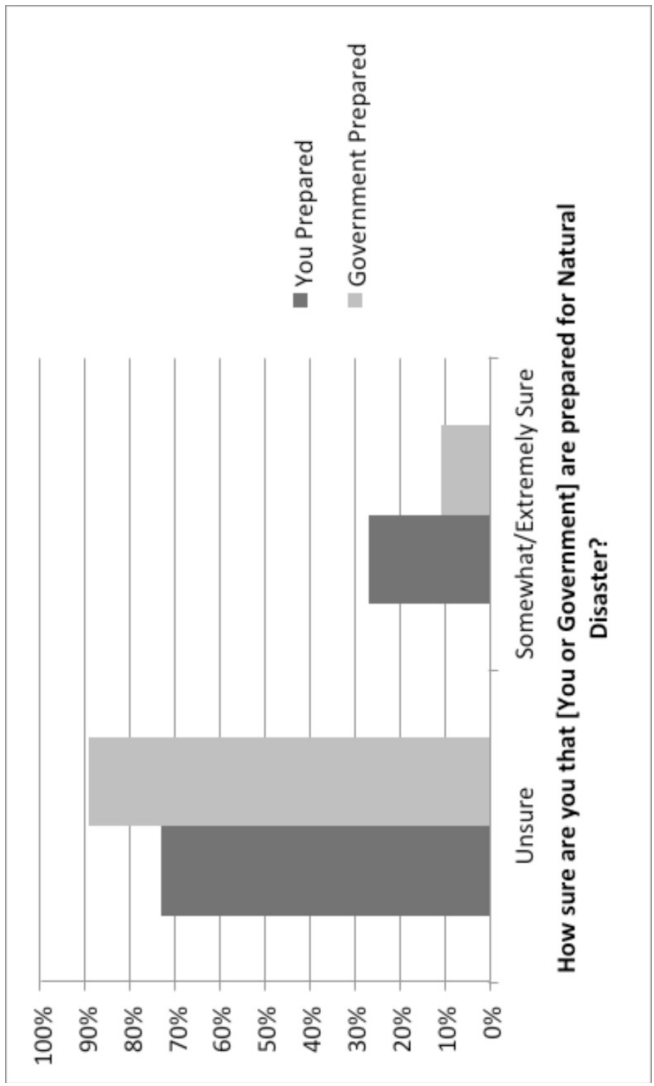


The role of government

73% of respondents were unsure of their ability to prepare for natural disasters. They further lacked confidence in the ability of the government to prepare for natural disasters, with almost 90% of respondents uncertain that the government is prepared. In general,

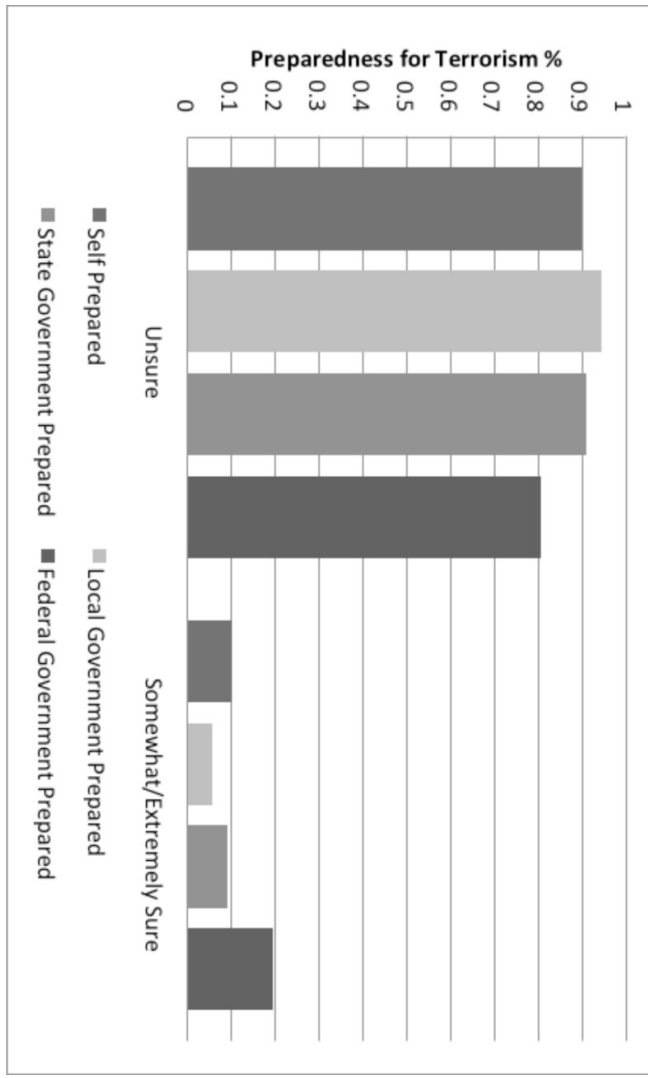
if respondents were sure of their own ability to prepare, they were more likely to be sure of their ability over any level of government. Understanding was shown to come from previously experiencing a natural disaster, with those who had been previously present in a natural disaster more likely to take any action to prepare for future disasters, $\chi 2\ (1) = 97.17$, $p < .001$.

Figure 2. The role of government in natural disaster preparedness management



The majority of respondents were unsure about their own ability to prepare, as well as that of the ability of local, state, and federal government. While emergency management begins at the localised government level, almost 90% of respondents were unsure of the ability of local government to prepare for, respond to, and recover from a terrorist attack (see Figure 3). However, respondents were most sure about the ability of the federal government to prepare for, respond to, and recover from terrorism, conceivably as it is the federal government who disseminate messages about terrorism.

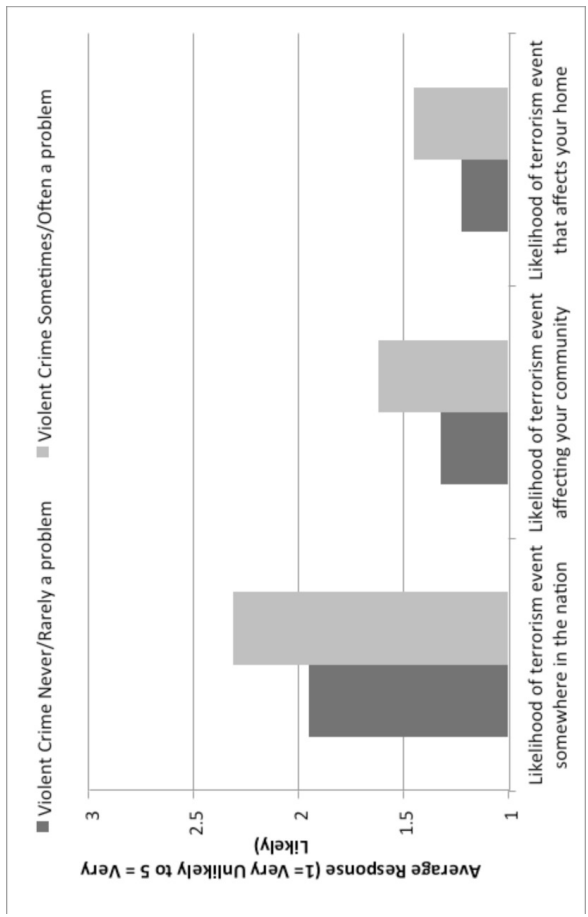
Figure 3. The role of government in terrorism prepardness management



The role of communities in preparing for and responding to terrorism

Respondents who were part of a more cohesive community had greater confidence in their ability to effectively respond to a terrorist attack ($\beta = .06$, $p < .05$). They were also more confident in the ability of federal and state government to prepare for and respond to potential terrorist attacks, ($\beta s > .05$, $ps < .05$). However, respondents who identified as being part of a less cohesive community were generally more uncertain and less confident about their ability to prepare for and respond to terrorism, as well as the government's ability to prepare and respond. This uncertainty led to a lack of preparedness and thus greater feelings of vulnerability about a potential attack. Moreover, this vulnerability to a terrorist attack was related to respondents' vulnerability about violent crime in general (see Figure 4); those who felt more vulnerable about terrorism were more likely to feel vulnerable to crime overall.

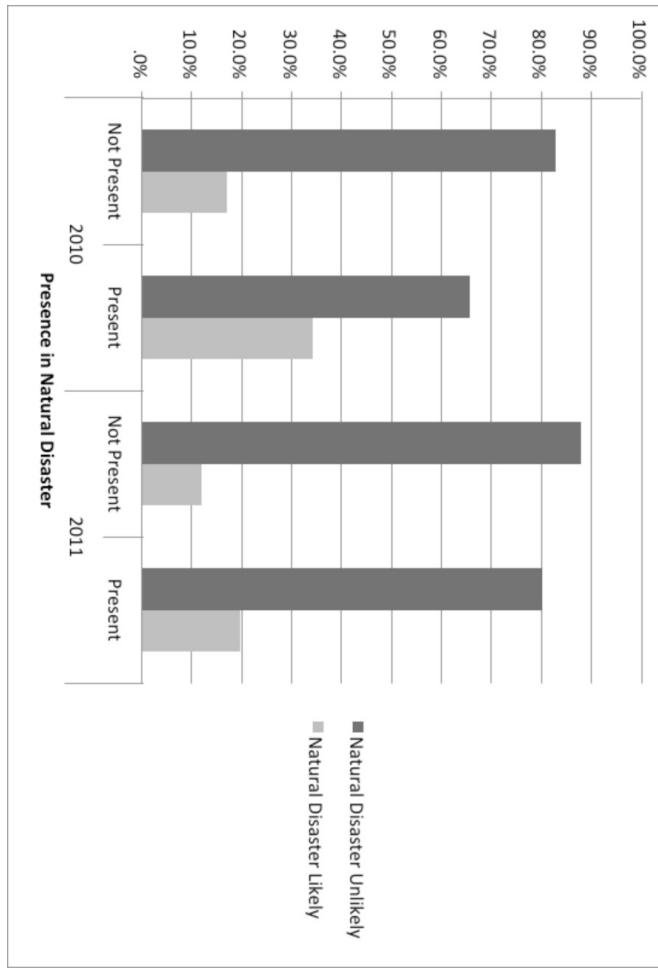
Figure 4. The role of communities and their perceptions of risk toward terrorism



Pre- and post-disaster perceptions of disaster risk

Using both the 2010 and 2011 waves of data, it is apparent that, since the Summer of Disasters, the perceived risk of another natural disaster has diminished (see Figure 5). While those respondents who were present during the floods and have been present during previous natural disasters have greater perceptions of risk towards another natural disaster, only 20% of respondents believe, after the floods, that a natural disaster is likely. Moreover, respondents had a greater amount of preparedness knowledge and more than 80% knew where to retrieve information pertaining to natural disaster preparedness after the events of the Summer of Disasters.

Figure 5. Pre- versus post-flood perceptions of risk of a natural disaster occuring in the community



Discussion

Effectively communicating the importance of preparing for emergency events, as well as ways in which individuals can prepare, is a fundamental responsibility for all tiers of government. The way individuals perceive risk and the extent to which they prepare for natural and terrorist events assist government agencies in analysing to what extent they need to educate the community on disaster preparedness. The goal of this analysis was to understand the initiatives undertaken by Queensland residents to prepare for natural and terrorist events, public perceptions of the government's role in disaster and emergency preparedness management, the relationship between perceptions of community cohesion and preparedness behaviour, and to assess whether perceptions of risk and preparedness behaviour have changed since the 2011 Summer of Disasters.

The preparedness initiatives undertaken by Queensland residents in our study were dependent on the context of the event. Of the seven practical preparedness activities that were chosen, developing emergency plans and stockpiling supplies were the most commonly chosen initiatives among respondents in the context of natural hazards, while duplicating important documents, and reducing air travel and use of public transportation were the chosen initiatives in the context of terrorism. This highlights the impact of perceptions of certain disasters on the actions of individuals (Mathbor, 2007) that can be influenced by the way in which certain disasters are communicated (Rodríguez, 2006). Moreover, it exemplifies the responsibility of governments to conceptualise the context-based knowledge and perceptions of disasters among communities in order to create effective and easily comprehended disaster preparedness messages (Nepal et al., 2011).

Disaster preparedness messages were more likely to be received and acted upon by respondents in natural disaster contexts than in terrorism contexts. This demonstrates that respondents perceived natural disasters as a more imminent event than acts of terrorism, as is likely the case in Queensland. Thus, while the events of 9/11 have increased both knowledge of terrorism and perceptions of risk towards terrorism among individuals, the results suggest that if government agencies wish to promote preparations for 'all hazards', they must take into account the inactions of respondents towards terrorism and generate effective information accordingly. Moreover, understanding people's perceptions of risk as it pertains to disasters is of great assistance to drafting appropriate disaster preparedness messages and communicating risk.

Respondents who had experienced and/or been affected by prior disasters were more likely to understand and act upon disaster-preparedness messages. This was in part due to the increased perceptions of risk about future disasters. Risk communication is an imperative element to effective disaster management and is underpinned by contextual elements, among other factors, which ensures that it is received and understood by a more varied audience (West & Orr, 2007). However, in general, the majority of respondents were unconfident and uncertain of their ability to prepare for disaster. Respondents attributed this lack of uncertainty in their ability to prepare for disasters to levels of trust and confidence in the ability of all tiers of government to prepare for disasters and protect its citizens from the effects of both natural and terrorist disasters.

Governments at all levels within Australia have begun the transition from having the sole responsibility for disaster preparedness to distributing preparedness responsibilities to Australian residents. This is to ensure, as part of the Emergency Management Plan, that in the event government cannot assist certain communities, especially remote rural communities, citizens have the capacity to stockpile supplies and respond to disasters while government intervention is absent (Emergency Management Queensland, 2008). The results exemplify that actions by local, state, and federal tiers of government are crucial to the level of trust citizens have towards these entities, as well as their willingness to prepare for disaster in response to government initiatives. Moreover, if governments could provide informative messages to educate communities about disaster preparedness, and respondents felt more informed and knowledgeable about ways to act before, during, and after a disaster, they were more likely to be certain about their abilities over any level of government.

Prior research suggests that local government has the most active role in disaster management (Emergency Management Queensland, 2008; Kusumasari et al., 2010). The role of local governments is important to foster engagement among local communities and devise community-specific disaster preparedness strategies that adhere to the individual concerns of the community in question (Nepal et al., 2011). Regardless of this crucial role, the majority of respondents were unsure of the abilities of local government to prepare for, respond to, and recover from disaster. Scholars have found a relationship between the limited knowledge of government entities about disaster preparedness, and the subsequently ill-informed public they govern (Mohanty et al., 2006; Seneviratne et al., 2010a). It is thus of great significance for

governments to increase their familiarity with disaster preparedness and distribute this knowledge to citizens.

The knowledge of citizens both as it pertains to disaster preparedness, as well as the contextual and demographic features of the community in which they are a part of (Mathbor, 2007), greatly enhances the cohesiveness of the community and thus their ability to prepare for disaster. Community cohesiveness increased the confidence of respondents in their ability to prepare for disaster, and further enhanced their confidence in the ability of government entities to prepare for disaster. Social cohesion has been shown to enrich the ability of communities to prepare for and respond to disasters (Sweet, 1998) as well as improve perceptions of risk and actions towards them (Anderson-Berry, 2003).

People's perceptions of risk are contextual and interchangeable. Since Queensland's Summer of Disasters in 2010–2011, respondents' perceptions of risk have diminished and their confidence in their ability to prepare for future disasters has increased. This reflects the findings of Paton and Johnston's (2001) study, which concluded that increased knowledge and education about disasters strengthens the confidence of communities and thus their capacity to prepare for disasters. There are disparities in confidence among those present in previous disasters and those who have never experienced the effects of disasters, in that those who have experienced the aftermath of disasters have increased perceptions of risk compared to those who have never experienced a disaster. It is the way in which people perceive risk, through the comprehension of certain contextual, social and demographic factors as well as general knowledge about disasters that enhances the ability of people to prepare for disaster. Experiencing a disaster increases perceptions of risk towards disaster, as these results suggest, but also enhances one's ability to prepare for disasters in the future.

Conclusion

The natural disasters that tore through Queensland in the summer of 2010 and into 2011 catalysed the impetus for more effective preparedness messages that involve the collaboration of community and government input. Understanding the ways in which Queensland residents prepare for disaster is crucial to developing effective policies that seek to further enhance preparedness behaviour. Findings from the LIQ Surveys highlight the positive impact that community cohesiveness has on preparedness both for natural and terrorist

disasters, as well as levels of resilience. While preparedness for natural disasters is higher than for terrorism, the occurrence of recent disasters and respondents' experiences with disasters has increased their perceptions of risk and levels of preparedness. Moreover, experiences in Queensland's Summer of Disasters have diminished respondents' perceptions of risk while increasing their confidence in their ability to prepare for future disasters. These findings have vast implications from a policy perspective on community and state planning for disasters, and highlight that the most fundamental elements to effective disaster preparedness initiatives are cooperation, the communication of risk, and the cohesion of communities in preparing for, responding to, and recovering from disasters.

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